The vinyl siding industry has made tremendous strides over the years in improving the overall sustainability of its products, as well as raising awareness for its environmental stewardship in relation to other cladding manufacturing segments. Yet, vinyl siding is often overlooked or dismissed as “a cheap plastic” by stakeholders involved in green building initiatives.

Environmental Product Declarations (EPDs)

An EPD report conveys the life cycle story of a product in a single, transparent, comprehensive document. Typically, it is a data-driven report that can be cumbersome to read.

VSI’s Sustainability Committee developed a creative idea: transform VSI’s latest rounds of EPDs into well-designed, user-friendly “marketing-style” pieces that can be utilized more effectively in the field by architects, building professionals, code officials and other relevant stakeholders.
Strategic Elements – A Marketing Approach

VSI formed a work group consisting of members, consultants and staff members to research and brainstorm innovative ways to craft the new marketing-friendly EPDs, including a vinyl siding, insulated vinyl siding and polypropylene siding version. Elements they wanted to focus on included:

- A majority of VSI member manufacturers participated in the life cycle process
- The report should emphasize the industry’s life span innovations
- Easy-to-read text supported by product images and visually-pleasing graphics (including using recycling graphics from previous initiatives)
- A well-organized chronology of features and benefits that make the environmental data section more understandable to builders, architects, consumers and sales professionals

VSI’s EPD Format

Each of the three EPD versions is arranged in the following order before arriving at the more technical, environmental data:

1. Advantages of Vinyl Siding: A 10-bullet point summary that describes the importance of specifying the products

2. Carbon Footprint: 9 BEES measurements covering the complete value chain, from an extremely resource-efficient manufacturing process requiring very few raw materials and less than 1% manufacturing waste to end-of-life recyclability that is second-to-none. BEES, which stands for “Building for Environmental and Economic Sustainability software,” is a tool developed by the National Institute of Standards and Technology (NIST) that measures the life cycles of different types of cladding

3. Recyclability: Features a graphic “how-to” for recycling vinyl siding emphasizing that end-of-life recycled vinyl siding is processed to make new vinyl siding as well as piping, decking and flooring

4. Longevity: Educates the reader on vinyl siding’s life span of 50+ years and its durability against extreme weather conditions

5. Materials Sustainability: Breaks down vinyl siding’s basic natural elements

6. Green Building Programs: Lists nationally-recognized programs that issue green credits to vinyl siding

7. Vinyl Siding Environmental Data: Provides accessible metrics that correspond with previous chapters and shows the Life Cycle Assessment (LCA)

8. Verification and Authorization of the Declaration: Features proof that the EPD was independently verified in accordance with ISO 14025 by ASTM, and that the LCA was independently verified in accordance with ISO 14044

The EPD and corresponding LCA were produced by Sustainable Solutions Corporation, a consultancy specializing in building and construction sustainability. Another third-party resource for this effort is Building Transparency, whose EC3 (Embodied Carbon in Construction Calculator) will store the completed and approved EPDs for use in design and material procurement through its matching building impact calculator.

Did you know, the main ingredient in vinyl siding is salt?
Marketing Vinyl Siding Sustainability through the VSI

The VSI and its Sustainability Committee agreed that if an EPD report’s intent is to “tell the life cycle story” then it should have a strategic marketing approach to both its design and content. People in the field need to understand the industry’s steadfast commitment to driving sustainability.

EPDs are a transparent way to communicate information about products’ environmental credentials and provide information for people to make informed usage and purchasing decisions. The group decided that each chapter could be re-purposed as a sales/technical sheet, and the entire EPD would double as a sales kit. Notwithstanding the marketing approach, the data is real and the verifications are authentic.

Overcoming Obstacles

One common challenge with EPDs is that some readers perceive the information in an EPD as being too complex to interpret and understand.

VSI’s Director of Communications, Lisa Dunn, said VSI’s updated EPDs provide the answers to many questions often asked by architects, builders, planners and other stakeholders.

The new EPDs also communicate product details in a credible, understandable way. “They help us ‘tell the story’ of each product per the EPD’s intent, yet in a way that is compelling and much easier-to-read and comprehend,” she said.